

BMC-B1

Falling Dart Impact Tester

This tester is used in an energy test which causes plastic films and foils to fail under specified conditions of impact of a free-falling dart.

This energy is expressed in terms of the weight of the dart falling from a specified height which would result in 50 % failure of specimens tested.

Principle

At the beginning of the test, choose a test method, estimate an initial mass and Δm .

Start the test.

If the first specimen is failure, decrease the mass of the falling dart by decreasing poise of Δm .

If the first specimen is not failure, add the mass of the falling dart by increasing poise of Δm .

In brief, increase or decrease the Δm according to whether the former specimen is failure or not.

After 20 specimens, calculate the total number of failure specimens N. If N is equal to 10, the test is over.

If N is less than 10, add specimen and continue to test until N is equal to 10. If N is more than 10, add specimen and continue the test until the number of non-failure specimen is 10.

Then calculate the test results according to special formula.



Features

- Correspond to international standards
- Novelty mechanical sculpt, considerate design
- Two test methods integration: A & B
- Special lighting design, easy to observe
- Micro-computer processes test results
- Intelligent testing enhances test efficiency
- Pneumatic clamping and releasing decrease test time and errors
- Test procedure requires no manual drawing and mark, data and parameters are displayed by LCD
- System identifies, calculates test data automatically - no manual intervention required
- Test stops automatically, results are displayed by multifold units, micro-printer prints results

Physical specifications

Dimensions

Method A 500 × 450 × 1320 mm (L x B xH)

Method B 500 × 450 × 2160 mm (L x B xH)

Net Weight

70 kg

Standards

GB 9639, ASTM D1709

Configuration

Standard: method A

Optional: method B

Note: compressed air provided by customers.

Technical data

Test method

A or B

Test range

Method A: 50 - 2000 g

Method B: 300 - 2000 g

Test accuracy

0.1 g (0.1 J)

Test condition

23 °C 50 % RH (standard)

Specimen clamping

pneumatic

Specimen size

> 150 x 150 mm

Power

AC 220 V, 50 Hz

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